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Agency Background

• Approaching 4,800 vehicles in service
• Central service provider to agencies, boards, commissions, and higher-education institutions
• Serving over 60,000 state employees
• Electric vehicles in fleet since 2014
• Purchase over 800 vehicles per year
EV Journey

- Started with Hybrid vehicles in 2002
- Deployed Nissan Leaf EV’s 2014
- Governor Inslee Announces Executive Order Dec 2015
- Deployed 1st Long Range Electric Vehicles April 2017
This “Washington State Electric Fleets Initiative” will ensure that at least 20% of all new state passenger vehicle purchases are electric vehicles by 2017.

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"I am announcing a new initiative to accelerate adoption of electric vehicles in public and private fleets. This “Washington State Electric Fleets Initiative” will ensure that at least 20% of all new state passenger vehicle purchases are electric vehicles by 2017. I am taking this action today to help fleets scale up their use of EVs, and to ‘double-down’ on the 10% EV fleet target established by the Pacific Coast Collaborative.

“We won’t defeat climate change unless we use all of the tools we have available—and that includes what we buy in the market place for our daily use. All institutions need to focus their procurement policies and practices on low-carbon options, as these investments will save money, protect public health, and secure our long-term future.”

--Governor Jay Inslee
Before we could buy EVs there were a couple of other problems we needed to solve:

- Availability of Long Range Electric Vehicle
- EV infrastructure
Long Term Goal

- **Planning, Procurement, and Implement**

![Graph showing the number of vehicles in service (Hybrids, Gasoline, Electric) from 2013 to 2025. The graph indicates a target for 2020, with a transition from gasoline to electric vehicles.]

Chevy Bolt
What’s ahead?

<table>
<thead>
<tr>
<th>Year</th>
<th>Affordable, long-range EV sedans</th>
<th>Affordable, long-range EV SUVs?</th>
<th>As batteries improve:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>![Car Icon]</td>
<td>![Car Icon]</td>
<td>![Car Icon]</td>
</tr>
<tr>
<td>2018</td>
<td>![Car Icon]</td>
<td>![Car Icon]</td>
<td>![Car Icon]</td>
</tr>
<tr>
<td>2019</td>
<td>![Car Icon]</td>
<td>![Car Icon]</td>
<td>![Car Icon]</td>
</tr>
</tbody>
</table>

As batteries improve:
• More capacity
• Longer range
• Lower cost
“EV available” means there is a cost-effective electric vehicle (EV) available in the market for this vehicle class.

“EV-ready” means the cost-effective EV currently available on the market is ready to fully meet the needs of your drivers.
Installation Project Overview

Identified replacement vehicles and sites for install
*(101 EV’s going to 25 sites)*
## Site Evaluation Process

### Pre-Work - Site Information
- Contact information and phone number(s)
- Address and location of parking stalls
- Leased or owned
- Relationship with landlord
- Status of the current lease agreement
- Power provider

### On-Site - Electrical Evaluation
- Meet electrical contractor, building manager, fleet contact, and owner
- Locate main electrical closet
- Number of panels
- Open breakers
- Distance and proximity to parking stalls
- Photos & Google Maps

### EVSE Information
- Confirm existing EVSE infrastructure
- Customer’s long-term plan – State vehicle, workplace charging, etc.
- Install infrastructure to meet future demands
- Quote from EVSE provider and/or electrical contractor
# Site Checklist

<table>
<thead>
<tr>
<th>Site Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency</td>
<td>Site Contact Name</td>
</tr>
<tr>
<td>Street Address</td>
<td>City</td>
</tr>
<tr>
<td>Leased</td>
<td># of affected Parking spaces</td>
</tr>
<tr>
<td>Owned</td>
<td>Is additional lighting needed?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of building main electrical closet</td>
<td>Do any panels have open space for circuit breakers?</td>
</tr>
<tr>
<td>Is 240 V evident?</td>
<td>Name of Power Company</td>
</tr>
<tr>
<td>Distance from Electrical supply to EV Parking (ft.)</td>
<td>If trenching is required, How many feet?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EVSE Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>How many charging heads are required?</td>
<td>Single or Dual head desired?</td>
</tr>
<tr>
<td>Any existing Chargers?</td>
<td>If so are existing chargers networked?</td>
</tr>
</tbody>
</table>

Obtain Photos of the following: Primary Charger location with building in view, Alternate Location with building in view, Electrical Room, Electrical Panels (Interior and Exterior), Existing Chargers.
Post Site Evaluation

✓ Submit proposal: Confirm you have the right contact(s) (*i.e. decision makers*)
✓ Coordinate installation
✓ Track and monitor progress
✓ Initialize chargers
✓ Helpful tip: Include pictures
Communication for Property Owners

Washington State Electric Vehicle Fleets Initiative

The Washington State Electric Vehicle (EV) Fleets Initiative is designed to reduce the state’s carbon pollution. The initiative is part of a larger Efficiency and Environmental Performance Program to meet statutory and executive requirements to improve energy efficiency and reduce environmental impacts.

Vehicle fleets have a large carbon footprint – and gas automobiles are the largest overall source of carbon emissions for the state. That’s why Governor Jay Inslee announced an initiative to ensure at least 20 percent of all new Washington state agency passenger vehicle purchases are electric, beginning in calendar year 2017.

More EVs will require more charging infrastructure. Enterprise Services is working to put measures in place to require EV charging stations at facilities leased by the state when lease agreements are initiated or renewed. State building codes already require infrastructure be laid for charging stations in parking lots of new apartment and office buildings and hotels to accommodate chargers in 5 percent of spaces.

Expected impact
- Improved air quality thanks to saving 4.7 metric tons of carbon emissions per vehicle annually.
- Saving taxpayer dollars due to lower maintenance and operation costs – fueling EVs is like filling up with gas that costs less than a dollar a gallon. And fewer moving parts mean no oil changes, tune ups or transmission repairs.
- Raising EV awareness and expanding the charging station infrastructure throughout the state is a good way to encourage others to buy green and save green.

Fleet operations are well suited to expanding the use of electric vehicles because they can utilize centralized charging, often have predictable routes and focus on life-time vehicle costs.

What’s happening now
State agencies are analyzing their vehicle fleets and working to put the infrastructure in place to support new EV purchases.

Meanwhile, the state is leveraging its government procurement power to expand EV options for state agencies, both for vehicles and charging systems that will support their use.

A multi-agency team, led by the Department of Enterprise Services, is working to ensure a smooth transition to more EVs in state fleets. The team reports on progress to the Governor’s Energy, Transportation and Climate Subcabinet as well as Results Washington.
Best Practices and Results

- Bring the right people to the table
- Preplanning is critical
- Be open to alternatives
- Expect to spend time educating people
- Each site and customer interaction is different
- Collaboration is key to success

<table>
<thead>
<tr>
<th>Zero Emission Miles</th>
<th>Estimated Gallons of Fuel Savings</th>
<th>CO2 Reduction: Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>207772</td>
<td>8,657.17</td>
<td>76.88</td>
</tr>
<tr>
<td>Based upon fleet average of 24 MPG</td>
<td></td>
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</tbody>
</table>
Thank you

Questions?

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